

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/013106

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 C07D471/04 C07D519/00 C07K5/00 C07H21/00 A61P35/00  
 A61K31/4745

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 IPC 7 C07D C07H C07K A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data, BEILSTEIN Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| X          | TUGUSHEVA, N. Z. ET AL: "Synthesis of 2,10,11-trisubstituted indolo[3,2-b]quinolines" CHEMISTRY OF HETEROCYCLIC COMPOUNDS (NEW YORK, NY, UNITED STATES)(TRANSLATION OF KHIMIYA GETEROTSIKLICHESKIKH SOEDINENII), 38(12), 1511-1517 CODEN: CHCCAL; ISSN: 0009-3122, 2002, XP002325161 page 1511, paragraph 1 page 1512; compound 11<br>-----<br>-/- | 1-25                  |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## ° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the International search

19 April 2005

Date of mailing of the International search report

02/05/2005

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|----------|---|-----------------------|
| X,P      | DATABASE CA 'Online!<br>CHEMICAL ABSTRACTS SERVICE, COLUMBUS,<br>OHIO, US;<br>ERITJA, RAMON: "Synthesis and properties<br>of oligonucleotides carrying cryptolepine<br>derivatives"<br>XP002325167<br>retrieved from STN<br>Database accession no. 2004:266490<br>abstract<br>& CHEMISTRY & BIODIVERSITY , 1(2),<br>289-295 CODEN: CBHIAM; ISSN: 1612-1872,<br>2004,<br>----- | 1-25                  |
| X        | YANG, SHU-WEI ET AL: "Synthesis and<br>Biological Evaluation of Analogues of<br>Cryptolepine, an Alkaloid Isolated from<br>the Suriname Rainforest"<br>JOURNAL OF NATURAL PRODUCTS , 62(7),<br>976-983 CODEN: JNPRDF; ISSN: 0163-3864,<br>1999, XP002325162<br>page 977; compound 24<br>abstract<br>page 979; table 1<br>page 979; compound 36<br>-----                       | 1-25                  |
| X        | SHARAF, MAGED H. M. ET AL:<br>"Cryptolepinone vs. hydroxycryptolepine:<br>resolution of a question of substituent<br>functionality and double bond<br>isomerization"<br>JOURNAL OF HETEROCYCLIC CHEMISTRY , 35(6),<br>1365-1369 CODEN: JHTCAD; ISSN: 0022-152X,<br>1998, XP000961096<br>page 1365, right-hand column<br>page 1368; compound 4<br>-----                        | 1-25                  |
| X        | CHEN, JUNJIE ET AL: "Synthesis and<br>cytotoxic activity of N-(2-<br>Diethylamino)ethylcarboxamide and other<br>derivatives of 10H-Quindoline"<br>BIOORGANIC & MEDICINAL CHEMISTRY , 10(7),<br>2381-2386 CODEN: BMECEP; ISSN: 0968-0896,<br>2002, XP002325164<br>page 2381; compounds 1A,1B<br>-----  | 1-25                  |
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
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| X          | WRIGHT, COLIN W. ET AL: "Synthesis and Evaluation of Cryptolepine Analogues for Their Potential as New Antimalarial Agents"<br>JOURNAL OF MEDICINAL CHEMISTRY , 44(19), 3187-3194 CODEN: JMCMAR; ISSN: 0022-2623, 2001, XP002325165<br>abstract<br>page 3188; compound 4A<br>page 3189; table 1   | 1-25                  |
| X          | WO 98/45272 A (LATROBE UNIVERSITY; DEADY, LESLIE, WILLIAM; DENNY, WILLIAM, ALEXANDER;) 15 October 1998 (1998-10-15)<br>abstract<br>page 11 - page 13; examples; table 1;<br>compound 7<br>claims  | 1-25                  |
| X          | TAKEUCHI Y ET AL: "Synthesis and antitumor activity of fused quinoline derivatives. IV. Novel 11-aminoindolo'3,2-b'quinolines"<br>CHEMICAL AND PHARMACEUTICAL BULLETIN, PHARMACEUTICAL SOCIETY OF JAPAN. TOKYO, JP,<br>vol. 45, no. 2, February 1997 (1997-02), pages 406-411, XP002081505<br>ISSN: 0009-2363<br>abstract<br>page 406; table 1<br>page 408; table 2 | 1-25                  |
| X          | GOERLITZER K ET AL: "UEBER 10-H-INDOL03,2-BCHINOLIN-5-OXID(OXYCHINDOLIN)UND SEINE DERIVATE"<br>PHARMAZIE, VEB VERLAG VOLK UND GESUNDHEIT.<br>BERLIN, DD,<br>vol. 52, no. 12, 1997, pages 919-926,<br>XP000961091<br>ISSN: 0031-7144<br>page 921; example 19   | 1,25                  |
| X          | DATABASE BEILSTEIN<br>BEILSTEIN INSTITUTE FOR ORGANIC CHEMISTRY,<br>FRANKFURT-MAIN, DE;<br>XP002325168 accession no. BRN 5440427<br>abstract<br>& CHEM.PHARM.BULL,<br>vol. 40, no. 2, 1992, pages 528-530,  | 1-25                  |
| X          | DATABASE BEILSTEIN<br>BEILSTEIN INSTITUTE FOR ORGANIC CHEMISTRY,<br>FRANKFURT-MAIN, DE;<br>XP002325169 accession no. BRN 3796677<br>abstract  | 1,25                  |

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|------------|--|-----------------------|
|            | & J.CHEM.SOC., 1948, page 922,<br><u>          </u>                                |                       |

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/EP2004/013106

| Patent document cited in search report | Publication date |                | Patent family member(s)              |  | Publication date                       |
|--|------------------|----------------|--------------------------------------|--|--|
| WO 9845272                             | A 15-10-1998     | AU<br>WO<br>ZA | 6712398 A<br>9845272 A1<br>9802958 A |  | 30-10-1998<br>15-10-1998<br>09-10-1998 |